

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 04-111418

(43)Date of publication of application : 13.04.1992

(51)Int.Cl.

H01L 21/205  
H01L 21/365  
// C30B 29/40  
C30B 29/48

(21)Application number : 02-231412

(71)Applicant : NIPPON TELEGR & TELEPH CORP <NTT>

(22)Date of filing : 31.08.1990

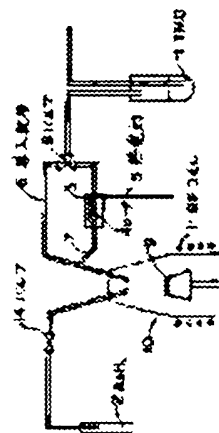
(72)Inventor : SHINOHARA MASANORI  
YOKOYAMA HARUKI

## (54) CRYSTAL GROWTH AND CRYSTAL GROWTH APPARATUS

### (57)Abstract:

**PURPOSE:** To enable easy atomic layer control and to reduce a supply amount which is necessary for crystal growth by supplying a specific metallic atom on a formation substrate and by supplying molecule having self-formation stopping mechanism on the formation substrate.

**CONSTITUTION:** Group III or II metal is supplied onto a formation substrate at a base of one layer or less. Molecule having self-formation stopping mechanism containing group III or II element is supplied. Monoatomic layer formation of group III or II element is thereby finished. A reaction container 10 for containing a formation substrate 9 of the device is provided with a first introduction piping for introducing a first raw material to a reaction pipe 10 and a second introduction piping for introducing a second raw material to a reaction pipe. The second introduction piping is made to diverge into a first divergent introduction piping and a second divergent introduction piping. The first divergent introduction piping is introduced to the reaction container as is and the second divergent introduction piping is introduced to a reaction container through a heating device 4 for thermal decomposition of organic metal raw gas.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of appeal against examiner's decision of rejection]